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STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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April 28, 1999

Mr. James E. Rasmussen, Director
U.S. Department of Energy
Environmental Assurance, Permits, and Policy Division
P.O. Box 550, MSIN: A5-15
Richland, Washington 99352

Mr. William D. Adair, Director
Fluor Daniel Hanford, Inc.
2420 Stevens Center, MSIN: H6-21
Richland, Washington 99352

Dear Messrs. Rasmussen and Adair:

Re: Notice of Deficiency Comments for the 219-S/Storage Part B Permit Application Chapters 2, 5, 6, 9, 10, and 13.

The Washington State Department of Ecology (Ecology) has reviewed the 219-S/Storage Part B Permit Application, Chapters 2, 5, 6, 9, 10, and 13. The areas of deficiency are itemized on the following pages. Please provide written response to Ecology's comments within two (2) months of the date you receive this letter. After Ecology receives the Department of Energy (DOE) response, comment resolution meetings will be scheduled, as necessary.

Ecology requests the following adjustments to the 1/19/99 version of the 219-S/Storage Part B Permit Application Review Working Draft Schedule:

- Extend the Ecology review of Chapter 3 to May 21, 1999;
- Include a complete hard copy of all Chapters previously submitted to Ecology with the July 25, 1999, submittal of Chapter 8;
- Extend issue resolution cycles to the end of February, and
- Extend to June 1, 2000, the transmittal of the final WD-1/RV1 to Ecology.

Ecology believes these modifications will allow both parties to produce a better quality product.

I look forward to working with your staff on the completion of this permitting effort.

If you have any questions or would like to schedule a meeting regarding this letter, please contact me at (509) 736-3003.

Sincerely,

Brenda L Becker-Khaleel

Brenda L. Becker-Khaleel
Nuclear Waste Program

BB:ld

cc: Joel F. Williams, WMH
John A. Winterhalder, WHM
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Administrative Record: 222-S Laboratory

Notice of Deficiency Comments 219-S Storage Facility April 2, 1999		
Comment #	**Comment**	**Closed on**
	General Comments	
1.	Ecology suggests renaming the *222-S Part B Permit Application* to the *219-S/Storage Part B Permit Application* to more accurately reflect the units being permitted.	
2.	All references to the 222-S Facility/Complex would refer to the portion of the facility/complex within the TSD Boundary.	
3.	Please address each requirement in Ecology publication #95-402 "Dangerous Waste Permit Application Requirements for Facilities which Store and/or Treat Dangerous Waste in Tank Systems and/or Containers." Be attentive to the level of detail required in the dangerous waste permit application. If sections are not applicable, state that the requirement is not applicable and provide an explanation.	
4.	According to the regulatory definition of tank system, ancillary equipment is included as part of the system. The 219-S Tank System's ancillary components have not been addressed in Chapter 2; add the piping, fittings, flanges, valves, etc., that are used to control the flow of dangerous waste from its point of generation to a storage or treatment tank.	
	Chapter 2	
5.	Section 2.0 - First paragraph. Provide a detailed description of "other waste management units," specifically dangerous waste management units.	
6.	Section 2.1 – 222-S Laboratory Complex Description. Describe the facility, including a general description of the nature of the business and the types of industries served. Types of industries would include potential off-site generators.	

7.	Section 2.1 – 222-S Laboratory Complex Description. Provide an overview of facility operations, including: facility management; dangerous waste categories managed; the operations to treat and/or store dangerous waste; the production processes and waste management processes that generate wastes; and the history and location of units regulated under the Dangerous Waste Regulations.	
8.	Section 2.1 – 222-S Laboratory Complex Description. Include both narrative and detailed flow diagram descriptions of the dangerous waste management operations and of the processes generating dangerous waste.	
9.	Section 2.1 - 222-S Laboratory Complex Description. Provide an integrated representation of how and where dangerous waste is generated at the 222-S facility, how and where dangerous waste generated off-site enters the 222-S facility, how waste is tracked, where the dangerous waste goes as it is treated and/or stored, and which equipment and structures are used to treat and/or store different categories of dangerous waste.	
10.	Section 2.1 – 222-S Laboratory Complex Description. Include processes that are regulated under the Dangerous Waste Regulations as "treatment-by-generator," "permit-by-rule," and/or recycling activities. The mercury-recycling unit is within the TSD unit boundary, and should be included in the permit application, as well as other regulated activities being conducted within the TSD boundary.	
11.	Section 2.1.1 – Waste Handling Facility. The "Waste Handling Facility" description needs to address the tank system, which includes all ancillary equipment. Provide as much design detail as is currently available. Drawings can be revised prior to the final Application submittal (6/2000) to incorporate final M-32-02 upgrades.	
12.	Section 2.1.3 – Room 2-B. Provide a more detailed description of the "portion" of the room being used for container storage.	
13.	Section 2.2 – Topographic Map. Submit a topographic map which shows the facility and a distance of 1,000 feet around it at a scale of 1" equal to no more than 200 feet.	

14.	Section 2.2 – Topographic Map. The topographic map must include: • contours sufficient to show surface water flow around each operational dangerous waste management unit within the facility • map scale and date • 100-year floodplain area • surface waters • surrounding land uses • wind rose • map orientation • legal boundaries of facility site The map must also indicate the location of access control, injection and withdrawal wells, buildings, structures (including sewers, loading and unloading areas, fire control facilities), flood control or drainage barriers, run-off control systems, and new and existing dangerous waste management units and solid waste management units. Several of the above mentioned criteria are provided on Drawing H-13-000006, however, several items have not been addressed. If drawing features are not applicable, make an appropriate statement in section B-2 and provide an explanation.	
15.	Section 2.2 – Topographic Map. Drawing H-13-000006 does not depict the same Treatment Storage and Disposal facility boundary as Figure RG97020139.1 in Part A, Form 3. Rectify drawing H-13-000006 appropriately.	
16.	Address seismic risk considerations listed in WAC 173-303-806(4)(a)(xi).	
17.	Section 2.3 – Roadway Traffic to the 222-S Laboratory Complex. Provide the following traffic-related information for the facility: traffic patterns on-site (within TSD boundary); estimated volumes, including number and types of all vehicles that travel on-site; traffic control signs, signals, and procedures; adequacy of access and on-site roads, including road surfacing and load bearing capacity; and the load-bearing capacity of load/unload areas. Show which areas on-site are asphalt and which are concrete. Specifically address traffic on the asphalt pad between the 222-S Laboratory and the 219-S Waste Handling Facility.	

18.	Section 2.4 – Release from Solid Waste Management Units. Facilities must identify locations where solid wastes have been or are managed, and provide information on known and suspected releases of dangerous waste and/or dangerous waste constituents. A solid waste management unit is defined as "any discernable location where solid waste has been placed at any time, even though the location may not have been intended for the management of solid or dangerous waste." For example, there was extensive piping from the W-087 project left "in place" and piping stored in a shielded staging area in the T8 tunnel. Reevaluate Section 2.4 as it pertains to these solid wastes and other solid waste management units within the laboratory complex. In addition, SWMUs identified in SWIDs should be attached as an appendix.	
Chapter 5		
19.	Provide certification verifying no releases from tank system/storage units to underlying soil and/or groundwater.	
Chapter 6		
20.	General Comment- Chapter 6 contains several references to Chapter 7 and Appendix 7A, without these references it is not possible to conduct a thorough review of Chapter 6.	
21.	Section 6.2.1 General Inspection Requirements [F-2a and F-2b] – Line 24 "preformed" should be changed to "performed."	
22.	Describe the items, or groups of items, to be inspected and the schedule for inspecting them. Be specific in identifying items to be inspected. For example, "personal protective equipment" is general, but listing "full face respirator" is specific.	
23.	Identify the types of problems to look for during inspections, for example, wet spots and other signs of leaks.	

24.	Section 6.2.1.2 Frequency of Inspection - Describe the frequency of inspection for specific items on the schedule. Be specific: "at least every 30 days" or "at least every 7 days" rather than "monthly" or "weekly." Include inspection of loading/unloading areas at 222-S and temperature/level monitoring equipment in the 219-S Waste Handling Facility. Inspections should be documented in the logbook. As written, this section fulfills the requirements specified in F-2d(3) for Storage of Ignitable or Reactive Wastes.	
25.	Areas subject to spills, such as storage areas and loading/unloading areas, and major features of the site must be inspected daily when in use.	
26.	Describe where the schedule will be kept at the facility. Identify where the operating record is maintained.	
27.	Describe the inspection log(s) used to record data from inspections and provide example logs. Show that the logs will include, at a minimum, the following: • date and time of inspection • printed name and the handwritten signature of the inspector • a notation of the observations made • an account of spills or discharges in accordance with WAC 173-303-145 • and the data and nature of any repairs or remedial actions taken. Also, demonstrate that the logs will be organized by location, and by frequency.	
28.	Section 6.2.2 Schedules and Procedures for Remedying Problems Revealed by Inspections – First paragraph, last sentence, change the word "for" to "from."	
29.	The schedule and procedure must demonstrate that, where a hazard is imminent or has already occurred, remedial action will be taken immediately.	
30.	The schedule and procedures should take into account the effect of time and supplies on the implementation of the remedial action.	
31.	The schedules and procedures must specify actual timelines for taking corrective measures for each type or category of problem that could be encountered.	
32.	Schedules and procedures must identify which position(s) is (are) responsible for taking corrective action or ensuring other staff remedy the problem(s).	
33.	For major categories of problems, describe the remedies to be taken; for example, to repair cracks in the secondary containment or floor of a storage/treatment area.	

34.	Section 6.2.3 Specific Process Inspection Requirements – Suggest integrating this section with other information provided to fulfill F-2a and F-2b inspection requirements.	
35.	Section 6.2.3.1 Container Inspection [F-2b(1)] – Address permit application requirements specified in Section F-2b Specific Process or Waste Type Inspection Requirements. Identify where the log of inspections will be maintained? How are corrective action data sheets tracked, and where are they tracked?	
36.	Section 6.2.3.2 Tank Inspection – Describe the response actions taken to mitigate the "source" of leakage from a tank. Describe actions taken to mitigate a tank overflow.	
37.	Specifically address all the requirements in Section F-2d(a) for Container Inspections, and F-2d(2) Tank System Inspections and Corrective Actions.	
38.	Section 6.3.1.1 Internal Communication – Line 46, delete "Most" and specifically address the units covered in this permit application.	
39.	Second paragraph – Identify what the "private automatic exchange system telephone" connects to. Also identify the alarms in these areas and when they would sound.	
40.	Section 6.3.1.2 External Communication – The permit application needs to demonstrate that if there is ever just one employee on the premises while the facility is operating, that employee would have immediate access to external communication. An example would be one employee in the 219-S Waste Handling Facility, or the 222-S Dangerous and Mixed Waste Storage Area.	
41.	Section 6.3.1.3 Emergency Equipment – This section does not address the location or availability of emergency equipment in the 219-S Waste Handling Facility or the 222-S Dangerous and Mixed Waste Storage Area.	
42.	Section 6.3.1.4 Water for Fire Control – Demonstrate the facility has water at adequate volume and pressure. Identify and describe how the Hanford Fire Dept. tests the fire control system.	
43.	Section 6.4.1 Unloading Operations – This section does not address loading of the tanker truck, loading or unloading of waste from the 222-S Dangerous and Mixed Waste Storage Area, or unloading of off-site waste. In addition, there is no mention of spill containment or loading/unloading procedures.	

44.	Lines 30-37. The discussion of unloading in Room 2-B appears to be out of place. Identify if a forklift, rigging, and/or crane will be used during unloading in Room 2-B.	
45.	Section 6.4.2 Run-Off – Is the 222-S Dangerous and Mixed Waste Storage Area 25.4 cm above ground level? Spills in Room 2-B are not addressed. Describe how they will be contained within the TSD boundary.	
46.	Section 6.4.4 Equipment and Power Failure – In the event of loss of electricity, the automated indicator alarms in 219-S are disabled. Specify if waste-generating activities in the 222-S laboratory will be stopped. Also identify if the tank level gauges are disabled if power failure occurs. In the 222-S Dangerous and Mixed Waste Storage Area, identify if power failure will affect ventilation.	
47.	Section 6.4.5 Personal Protection Equipment (PPE) – Identify the PPE located in each of the waste management areas. What precautions are taken to prevent personal exposure to fumes and/or dangerous waste in the 222-S Dangerous and Mixed Waste Storage Area and 219-S Waste Handling Facility?	
48.	Section 6.5.1 Precautions to Prevent Ignition or Reaction or Ignitable or Reactive Waste – Change "Reaction or Ignitable" to "Reaction of Ignitable."	
49.	Third bullet – Describe how waste is being packaged in Room 2-B.	
50.	Fourth bullet – Identify the flammable cabinet available within the TSD boundary of Room 2-B.	
51.	Section 6.5.2 Precautions for Handling Ignitable or reactive Waste and Mixing of Incompatible Waste – This section needs additional detail, refer to the regulatory requirements provided in WAC 173-303-806(c)(x). Line 4 references should be changed to include WAC 173-303-640(9) and (10). Based on regulatory requirements it is anticipated that a complete compatibility assessment will be provided in Chapter 3.	
52.	Dangerous Waste Permit Application Requirements specified in Sections F-5b(1) Ignitable or Reactive Wastes in Tanks and F-5b(2) Incompatible Wastes in Containers or Tanks were not addressed in the Draft Permit Application.	

Chapter 9		
53.	Update reference to 40 CFR 270.10(j), modify statement to indicate 40 CFR 270.10(j) is not applicable because of disposal method (surface impoundment or landfill) exclusions, not definitions.	
Chapter 10		
54.	No comments	
Chapter 13		
55.	Federal, state, and local laws applicable to the Hanford Facility are discussed in Chapter 13 of the General Information Portion (DOE/RL-91-28). List federal, state, and local laws applicable to the 219-S Waste Handling Facility and 222-S Dangerous and Mixed Waste Storage Areas. For example, provide TSD specific information for issued permits and approvals, provide permit/approval numbers, for the following applicable laws: • Atomic Energy Act • Clean Air Act • Washington Clean Air Act • Clean Water Act • Washington Water Pollution Control Act • Comprehensive Environmental Response, Compensation, and Liability Act • Emergency Planning and Community Right-to-Know Act • Toxic Substance Control Act	
56.	Provide a completed environmental checklist prepared under the State Environmental Policy Act or reference an existing SEPA document already prepared for the facility.	